

# Comparisons of Job Characteristics

**Focus Occupation:** [Electricians \(47-2111\)](#)

**Associated Occupation:** [Electrical and Electronics Repairers, Powerhouse, Substation, and Relay \(49-2095\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 84

**Focus Occupation:** Electricians (47-2111)

**Associated Occupation:** Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	17.1	16.5	0 Current knowledge level may be sufficient
Design	5.2	13.2	13.4	0 Current knowledge level may be sufficient
Public Safety and Security	6.9	12.7	7.6	<< Extensive education and/or training may be required
Computers and Electronics	8.4	12.2	10.1	< Expanded education and/or training may be required
Physics	4.3	10.1	10.9	0 Current knowledge level may be sufficient
Telecommunications	3.9	10.0	10.4	0 Current knowledge level may be sufficient
Engineering and Technology	5.7	9.3	11.8	> Current knowledge level is likely sufficient
Building and Construction	4.0	8.4	14.6	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 72

**Focus Occupation:** Electricians (47-2111)

**Associated Occupation:** Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Equipment Maintenance	3.5	11.4	10.3	< A higher skill level may be required
Repairing	3.4	11.1	11.6	0 Current skill level may be sufficient
Troubleshooting	4.5	10.7	12.3	> Skill level is likely sufficient
Quality Control Analysis	5.9	10.2	11.0	0 Current skill level may be sufficient
Operation Monitoring	6.6	10.0	10.5	0 Current skill level may be sufficient

Equipment Selection	3.3	5.6	8.4	>>	Skill level is likely more than sufficient
---------------------	-----	-----	-----	----	--

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 87			
Focus Occupation: Electricians (47-2111)					
Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	10.3	11.0	0	Current ability level may be sufficient
Visualization	7.5	10.1	12.2	>	Current ability level is likely sufficient
Control Precision	6.6	10.0	9.5	0	Current ability level may be sufficient
Selective Attention	8.7	10.0	9.4	0	Current ability level may be sufficient
Finger Dexterity	7.6	9.8	11.8	>	Current ability level is likely sufficient
Manual Dexterity	6.5	9.4	11.6	>	Current ability level is likely sufficient
Visual Color Discrimination	6.4	9.3	12.8	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 91
Focus Occupation: Electricians (47-2111)		
Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)		
Work Activities	Exclusivity of Activity	
Analyze operation of malfunctioning electrical or electronic equipment	68	
Distinguish colors	44	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install electrical fixtures or components	71	
Install lead-in wires to control boxes and other components	89	
Install or replace meters, regulators, or related measuring or control devices	66	
Install/connect electrical equipment to power circuit	57	
Maintain electrician's tools or equipment	92	
Perform safety inspections in industrial, manufacturing or repair setting	32	
Prepare reports	8	
Read blueprints	10	
Read tape measure	41	
Read technical drawings	7	
Repair or adjust measuring or control devices	71	
Repair or replace electrical wiring, circuits, fixtures, or equipment	49	
Replace electronic components	63	

Solder electrical or electronic connections or components	55
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test electronic or electrical circuit connections	66
Understand service or repair manuals	40
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use high voltage apparatus	76
Use interpersonal communication techniques	10
Use measuring devices in construction or extraction work	41
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: n/a

**Focus Occupation: Electricians (47-2111)**

**Associated Occupation: Electrical and Electronics Repairers, Powerhouse, Substation, and Relay (49-2095)**

### Tools and Technologies

### Exclusivity

Tools and technology data is unavailable for one or both occupations.

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.